

APPENDIX B – ADDITIONAL SUPPORT FOR THE COASTAL IMPACT ASSISTANCE PLAN

The context for this Plan, and of Louisiana's approach to CARA more generally, arises from two characteristics of coastal Louisiana that are unique in the nation. First, America's domestic energy future, for the next decade at least, is linked to the pace of oil and gas development offshore of this one state. Second, the efficient operation of that vital and fast changing industry is increasingly dependent on a relatively small number of support facilities found only in coastal Louisiana. These port and pipeline facilities exist because the state has partnered with private industry to develop federal OCS resources. While concentration on a few facilities has resulted in new efficiencies, it may increase the potential for significant economic disruptions caused by hurricanes or accidents. That risk escalates as the remaining marshes and barrier islands that protect these facilities from storm waves continue to convert to open water.

Louisiana And Deep Water Oil And Gas

The focus for OCS oil and gas exploration and production in the Gulf of Mexico is moving into waters more than a mile deep on the continental slope. Despite national discussion of other onshore and offshore frontiers in the United States, it is certain that any near-term augmentation of domestic energy production will largely be met from the deep (>1,000 ft water depth) and ultra-deep (>3,000 ft) offshore in the Gulf of Mexico. The vast majority of recent U.S. discoveries have been made in deep waters offshore of Louisiana. Most of these are clustered in the east toward the Mississippi River mouth.

The geography of leasing and discovery means that the logistics of acquiring new oil and gas in America over the next decade will largely be staged from coastal Louisiana. This logistics platform will come from a handful of specially equipped ports located on the fringes of the hurricane-prone Mississippi River deltaic plain. Furthermore, most oil and gas produced from new fields over the next decade will be landed in Louisiana, where it will join the foreign crude that is pumped from supertankers through the Louisiana Offshore Oil Port (LOOP), located 18 miles south of Port Fourchon. It will move onshore through a pipeline network that has expanded out of Louisiana's coastal wetlands to reach farther and farther offshore.

The ultra-deep industry requires specialized port facilities that are accessible to larger, deeper-draft supply ships that can safely and economically cover the greater distances necessary. These ships are nearly 100 ft longer and require channels 7 feet deeper (23 ft draft) than the 180 ft supply vessels that were formerly the industry standard. These and other technological changes have spurred both public and private investment to upgrade the existing port infrastructure. For example, the State of Louisiana provided initial funds in 1995 for construction of Port Fourchon, a completely new facility designed expressly to serve the deepwater industry. The thousands of people who work on offshore structures served by Port Fourchon as well as the stream of trucks bringing water and supplies to, and hauling wastes from, this multi-million dollar facility must traverse 100 miles of an often flooded two-lane state highway, much of it through the marsh.

This year the state legislature appropriated additional state funds to begin deepening the navigation channel to Morgan City, a more protected port with extensive fabrication yards, to better support the ultra-deep industry. These and other public costs of offshore oil and gas development borne by the state may once have been justifiable on the basis of economic development, as well as revenues from state lease sales and royalties.

Production of both oil and gas from state lands and waters peaked in 1970, however, then dropped off precipitously in the 1980s, and has been declining at a rate of 3 to 6 percent per year since. Mineral revenues from state lands and waters peaked later, in 1981, when they contributed 41 percent of total state revenues. State mineral revenues are now one-third of what they were in the early 1980s, and will pay for less than 4 percent of the 2002 state budget. In contrast, both oil and gas production from federal waters more than three miles off Louisiana's coast are at near record levels.

The prospect of increased domestic energy production is a boon to the Nation, but OCS production from the ultra-deep offshore today is a mixed blessing to Louisiana. The industry now employs about half the number of Louisianans it once did, and this number is expected to continue to decline, regardless of developments on the ultra-deep frontier. Ultra-deep drilling ventures in the Gulf are highly automated and generally managed and operated from outside the state. Approximately half of the personnel still required to man offshore facilities reside in other states as far away as Missouri. Another trend that affects employment in the manufacturing sector is the increasing proportion of the advanced structures used in ultra-deep operations that are now fabricated outside of the United States, rather than within Louisiana.

Pipelines that will bring ultra-deep oil and natural gas onshore will connect to an existing collection and distribution network that has developed over the past 60 years within the marshes of the Mississippi River deltaic plain. The continued maintenance of this elaborate pipeline network within Louisiana's fragile coastal wetlands will therefore be required, like the port infrastructure, long after the oil and gas industry has ceased to be a major source of state revenues. At the same time, it can be anticipated that state taxpayers will be incurring significant additional costs for projects to stop the catastrophic loss of wetlands exacerbated by oil and gas activities over many years, both onshore and offshore. That cost is estimated to be as high as \$14 billion in COAST 2050.

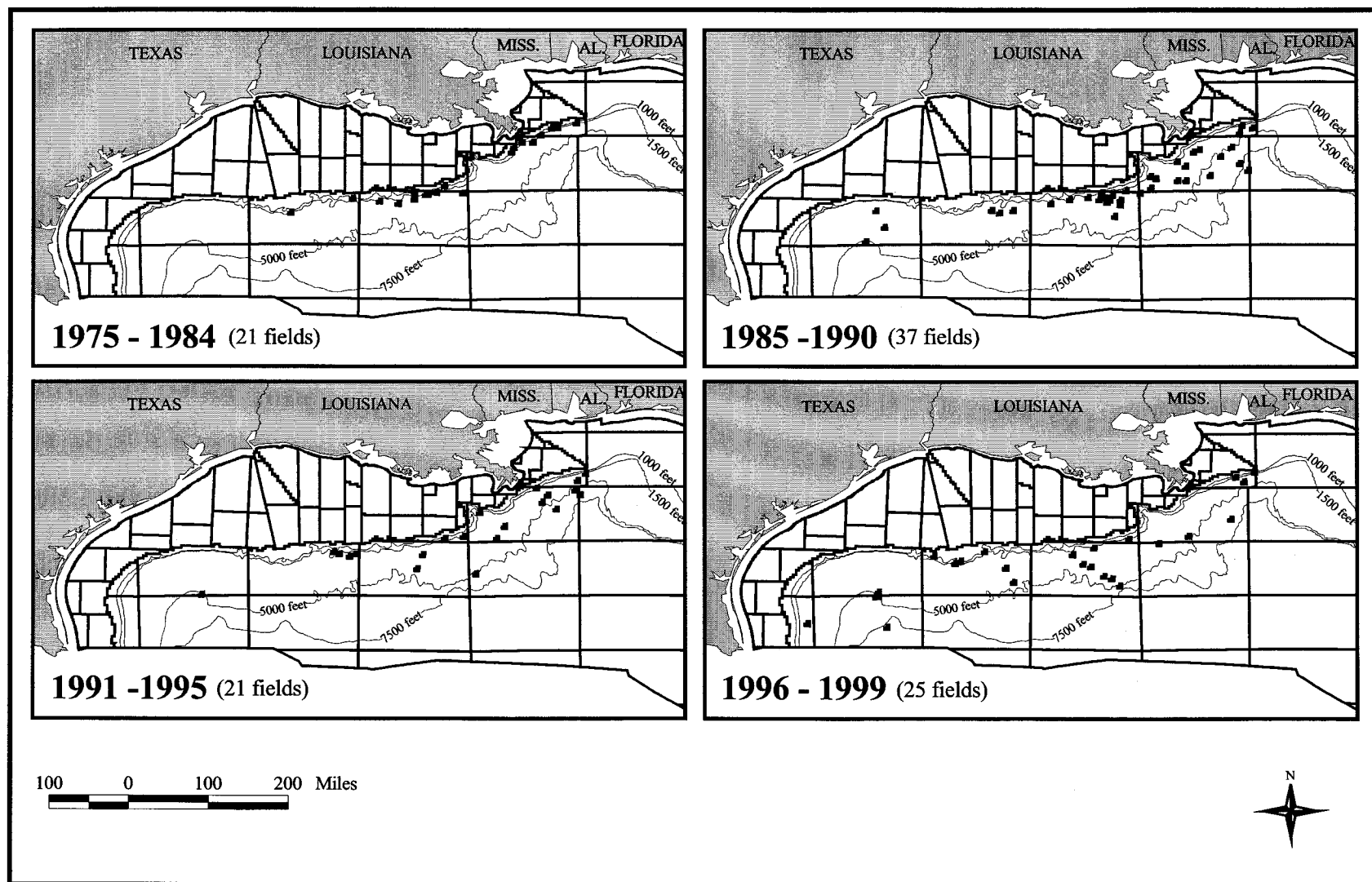


Fig. A Deepwater discoveries in the Gulf of Mexico.

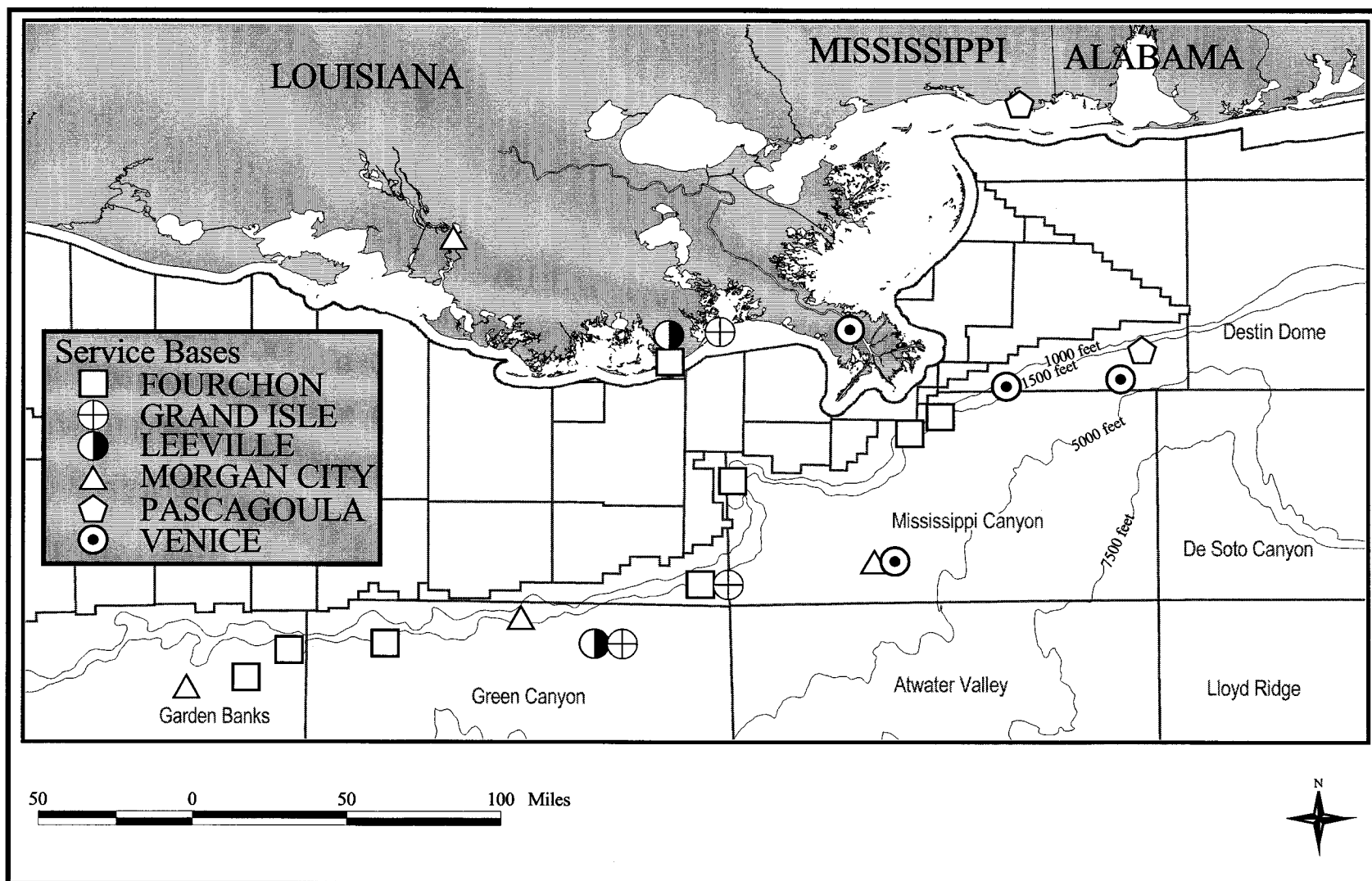


Fig. B. - Onshore service bases for existing deepwater structures.

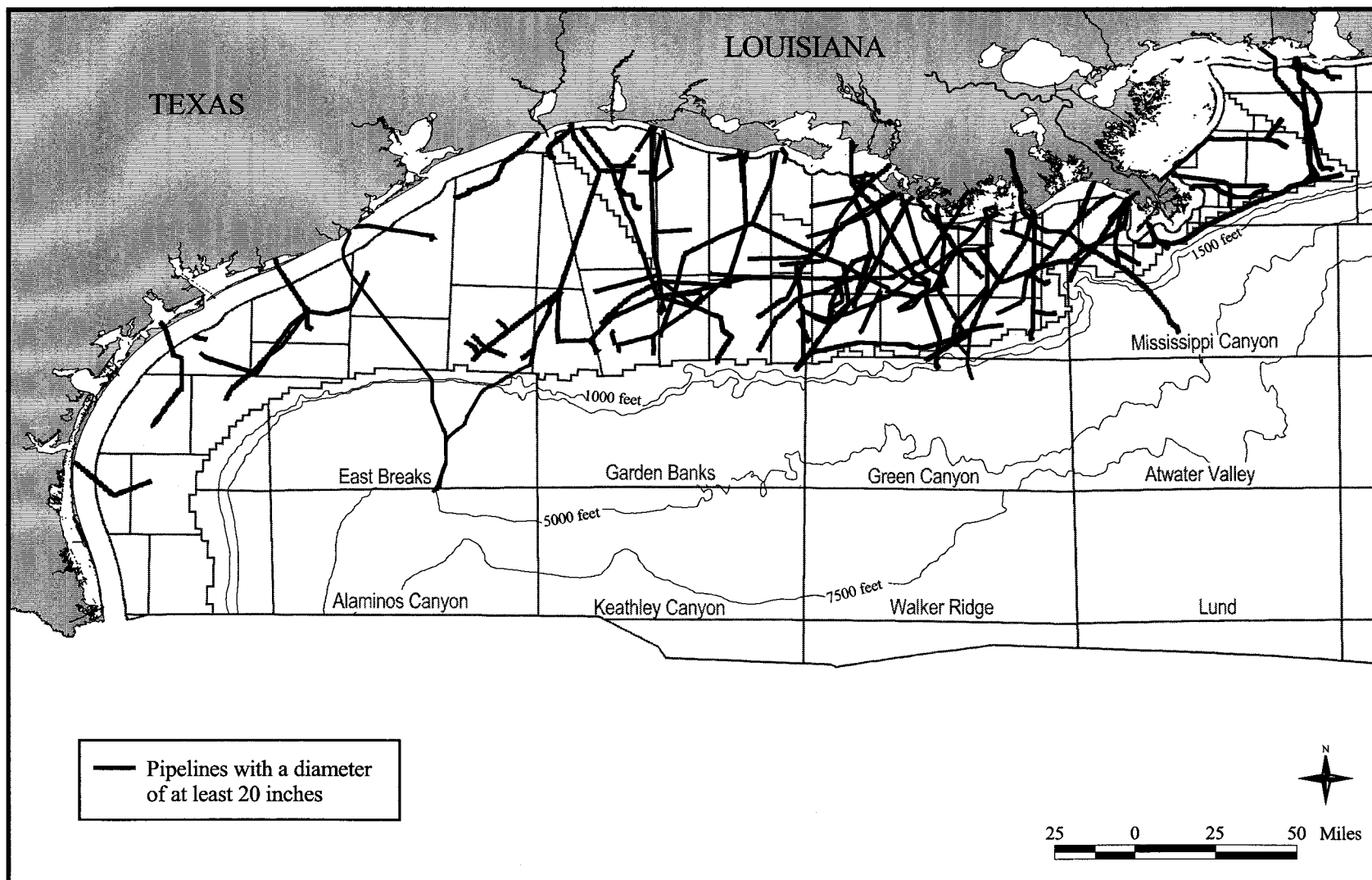


Fig. C - Oil and gas pipelines with diameters greater than or equal to 20 inches.

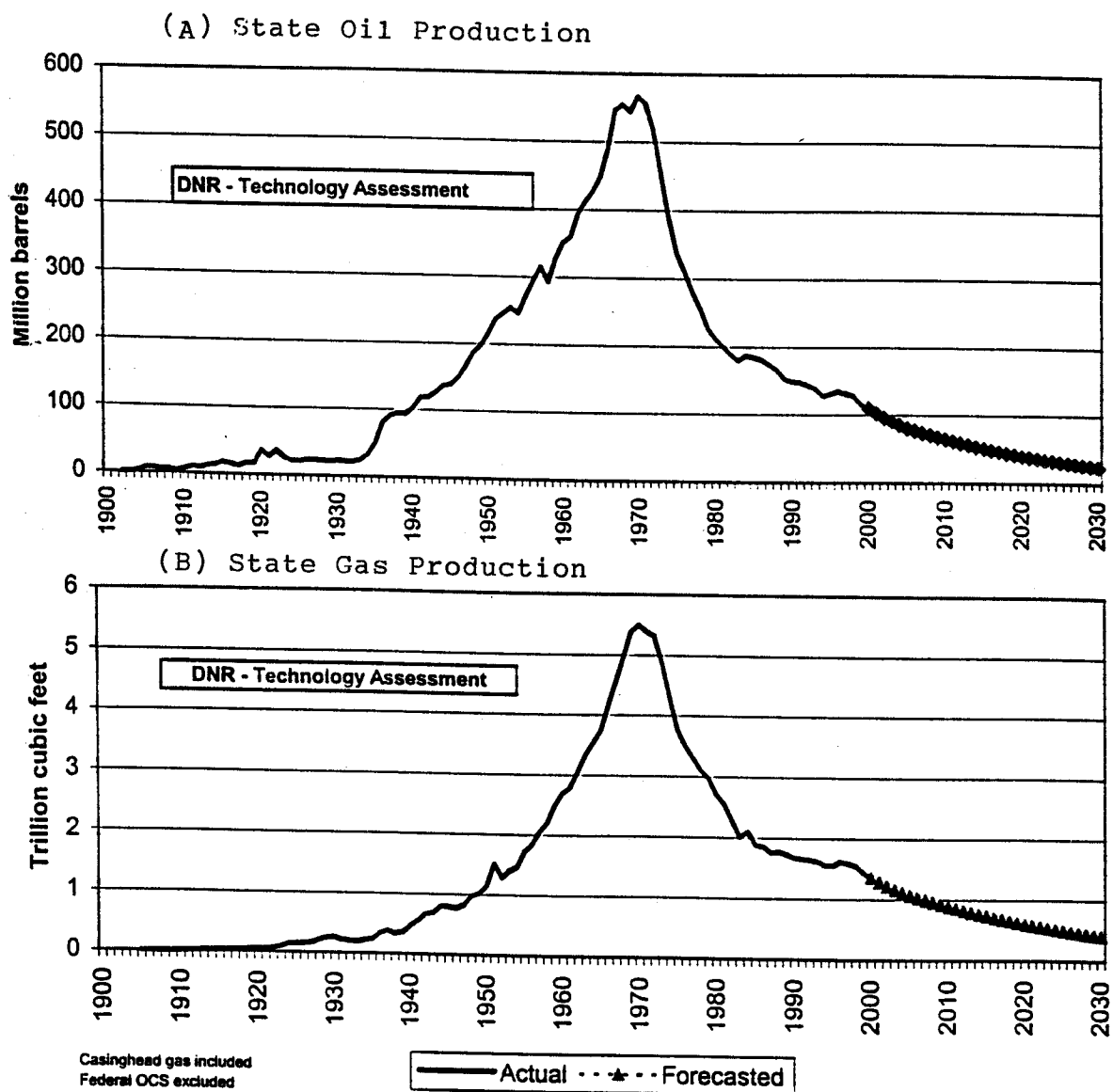


Figure D. State Oil and Gas Production, Actual and Forecasted Through 2030 (Source: Louisiana Department of Natural Resources, November 2, 2000)

Louisiana State Total Mineral Revenue

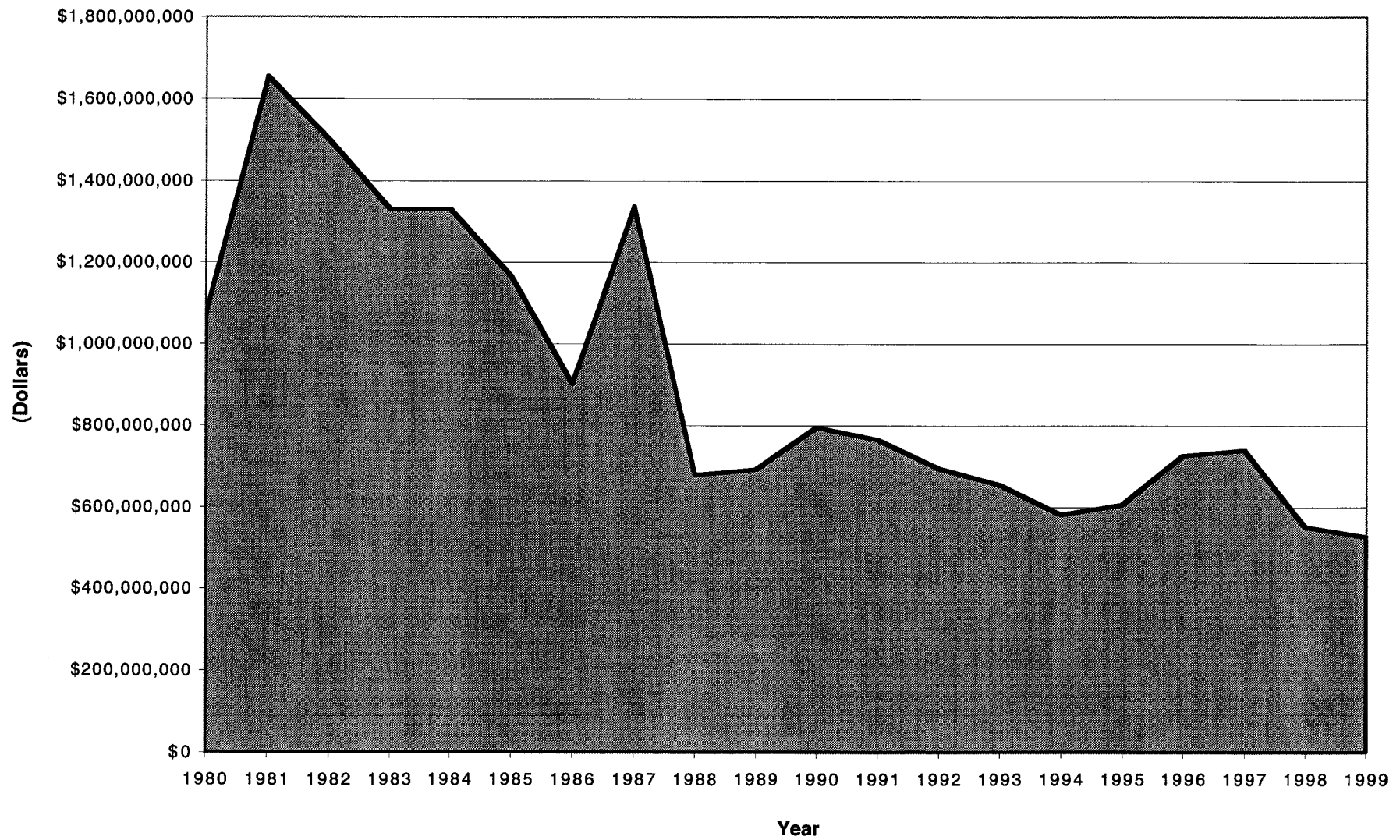
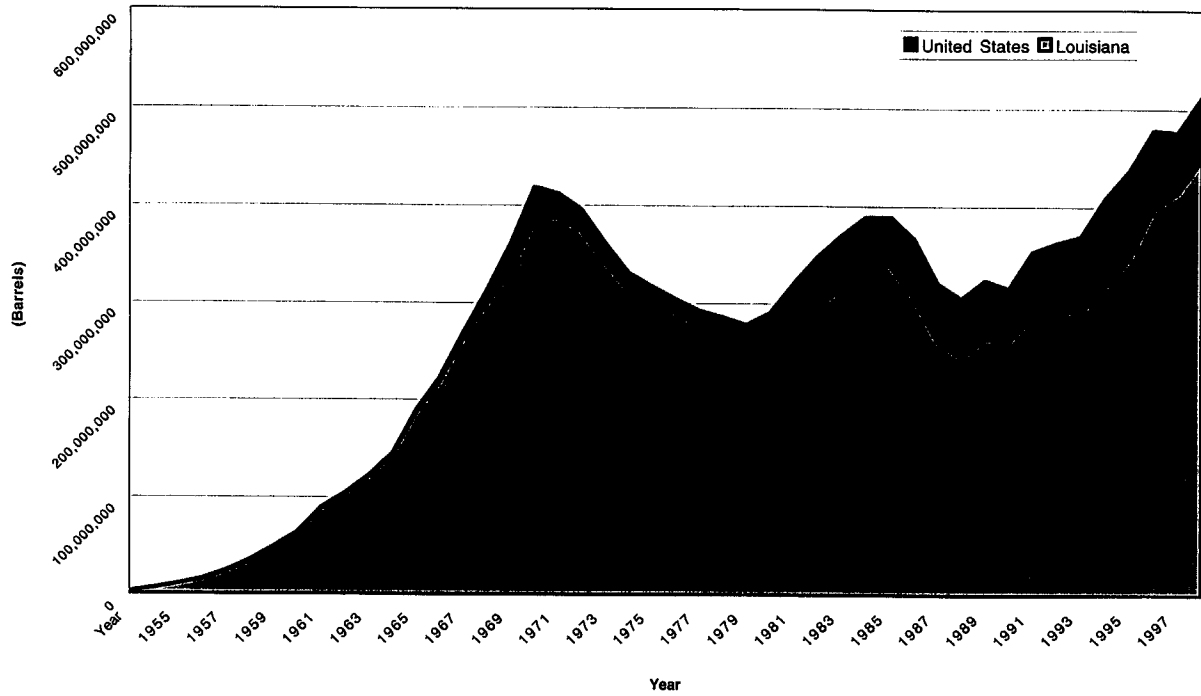


Fig. E

United States and Louisiana OCS Crude Oil and Condensate Production



United States and Louisiana OCS Gas Production*

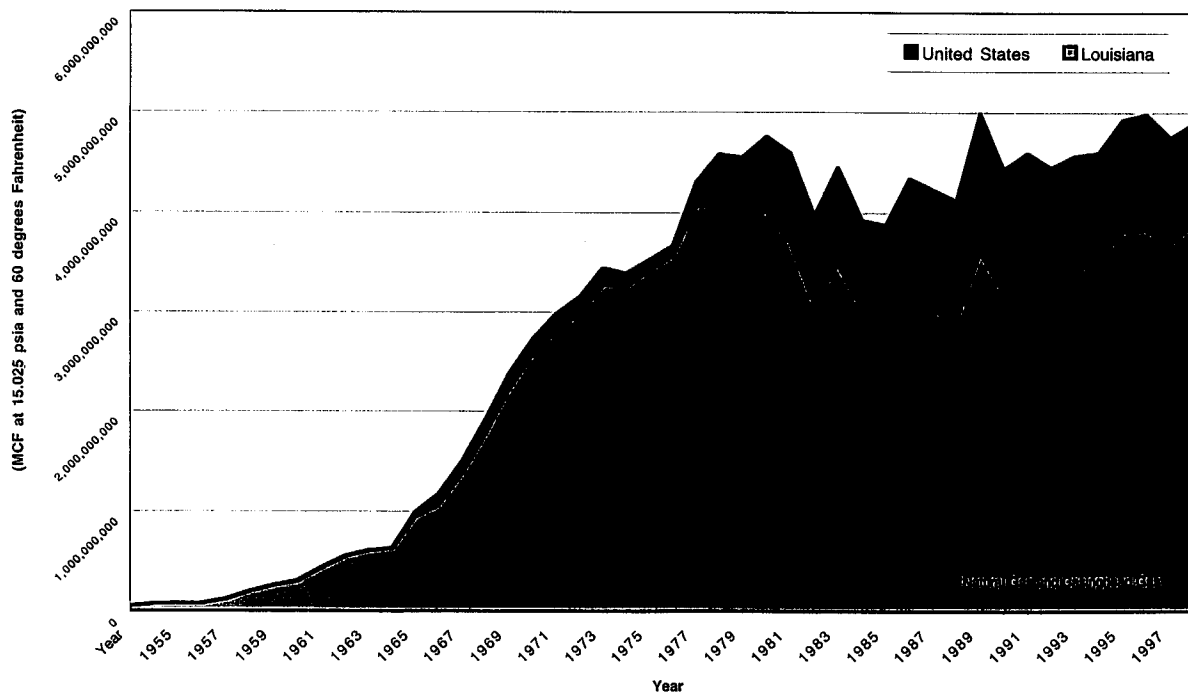


Fig. F

Louisiana Employment in Oil and Gas Production

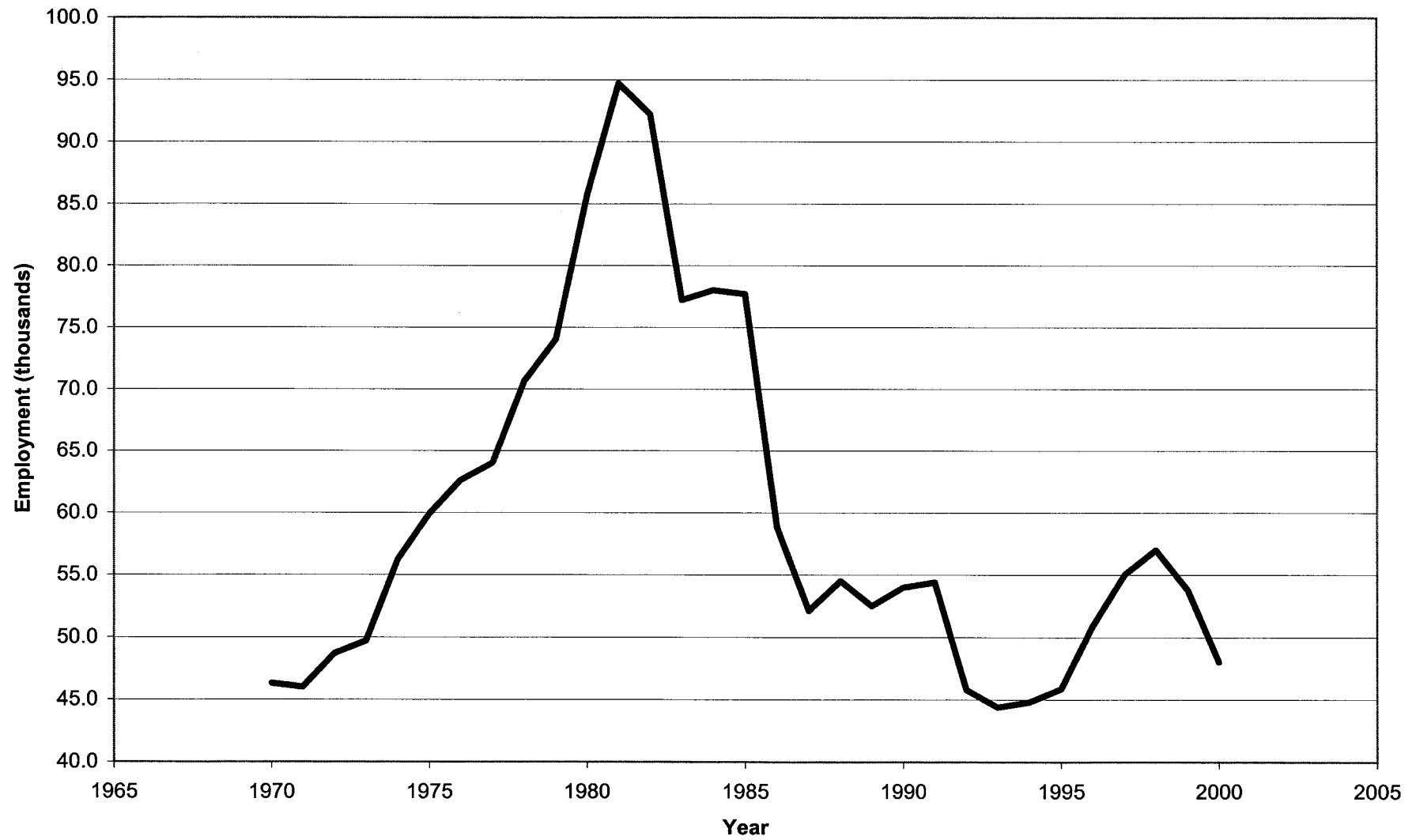
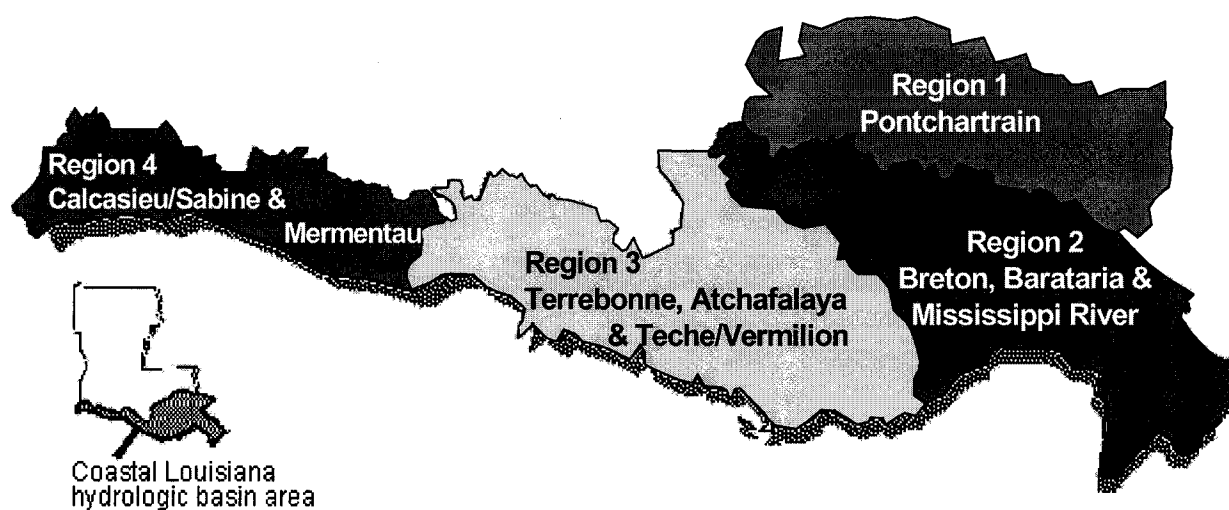


Fig. G

Table 1. Wetlands Loss Projections (From Coast 2050 Main Report)

Region	Basin	Acres of marsh in 1990	Acres of marsh lost by 2050 without restoration	Acres of marsh preserved by the Breaux Act and diversions	Net acres of marsh lost by 2050 at current restoration levels	Acres of swamp in 1990	Acres of swamp lost by 2050 at current restoration levels
1	Pontchartrain	253,000	50,330	4,720	45,610	213,570	105,100
2	Breton Sound	171,100	44,480	17,900	26,580	0	0
2	Mississippi Delta	64,100	24,730	18,340	6,390	0	0
2	Barataria	423,500	134,990	42,420	92,570	146,360	80,090
3	Terrebonne	488,800	145,250	5,170	140,080	152,400	46,700
3	Atchafalaya	48,800	(30,030)*	8,080	(38,110)*	12,600	0
3	Teche/ Vermilion	234,300	32,160	3,360	28,800	18,390	0
4	Mermentau	441,000	61,710	2,600	59,110	370	0
4	Calcasieu/ Sabine	317,100	50,840	12,440	38,400	170	0
Total		2,441,700	514,460	115,030	399,430	543,860	231,890



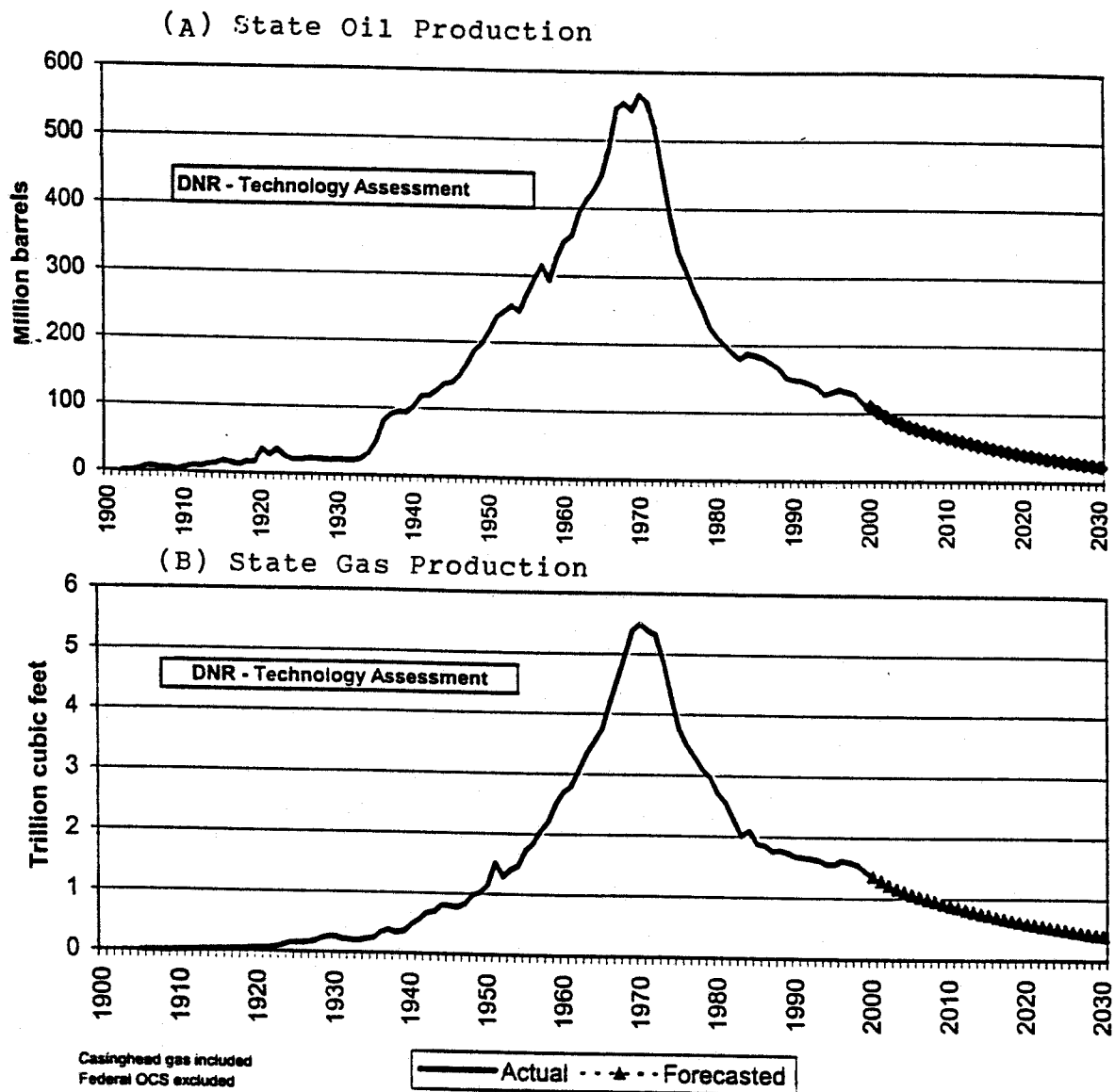


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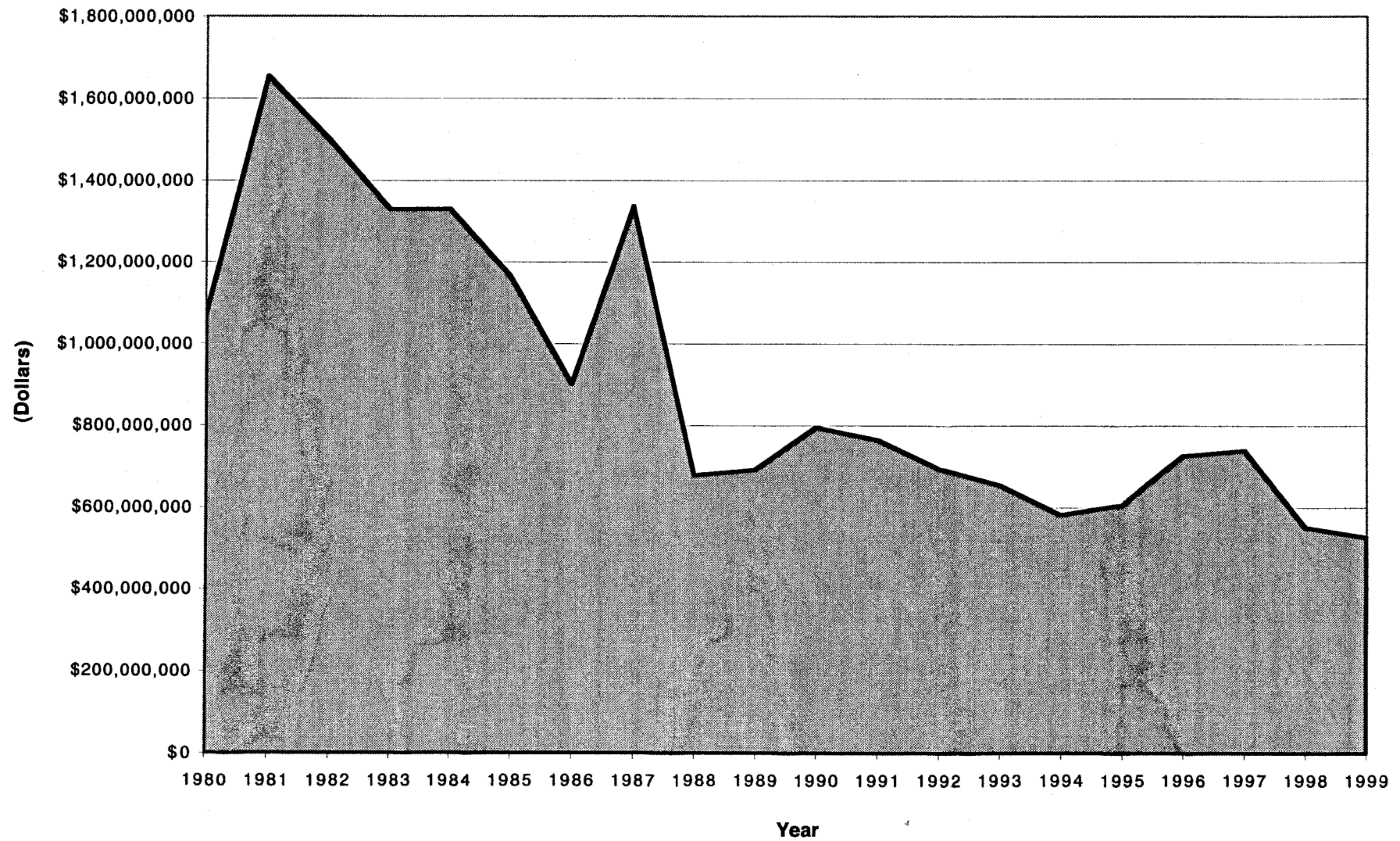
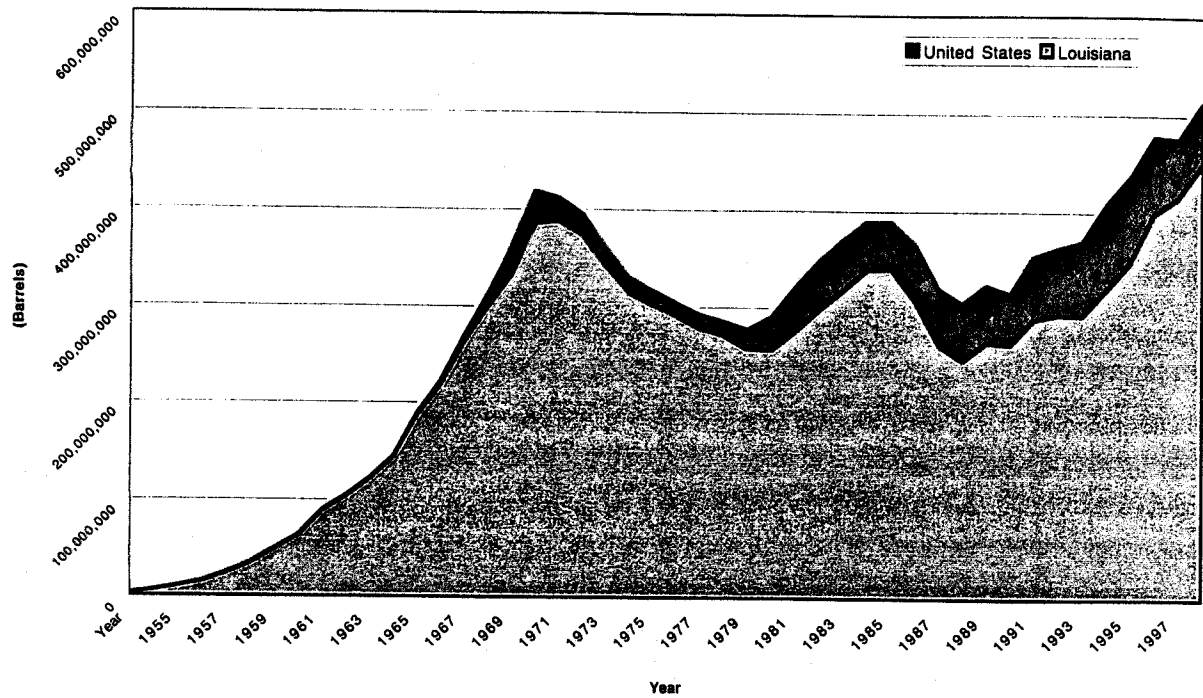


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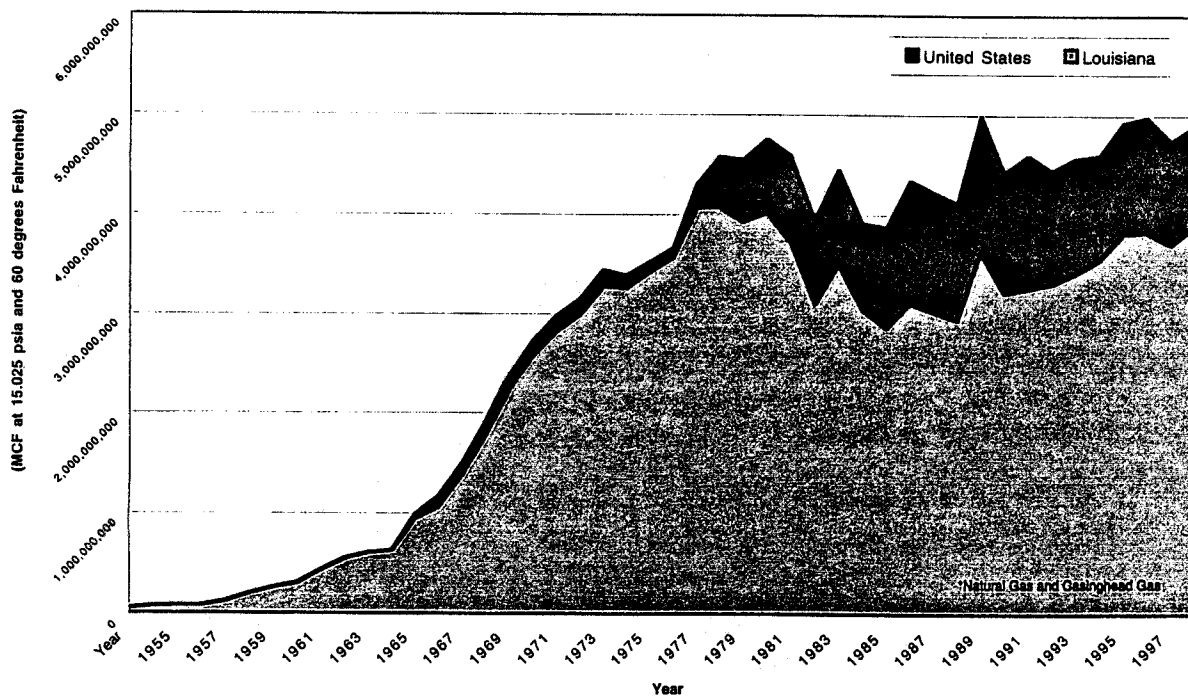


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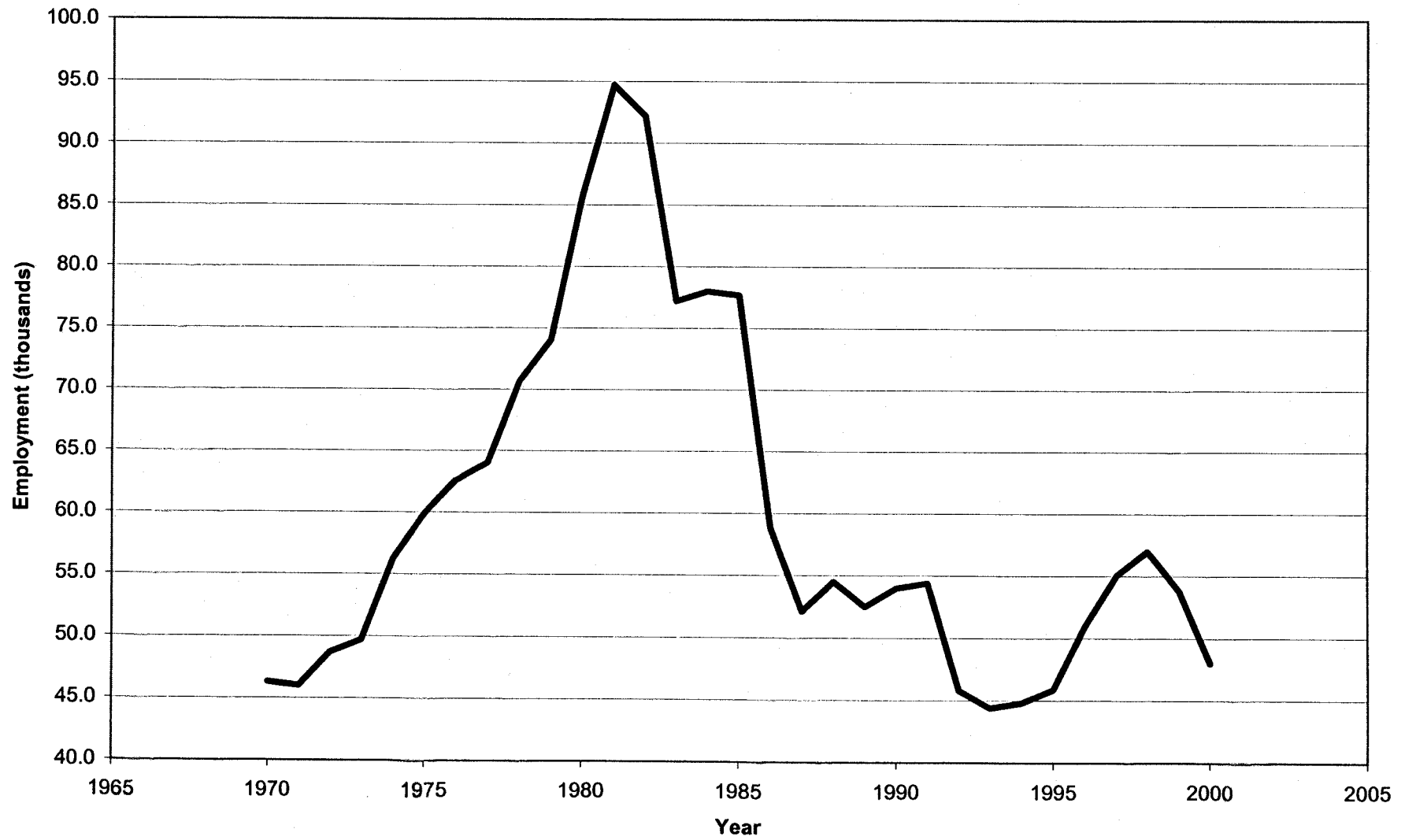


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